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What is claimed is:

- 1. A motor comprising:
- (a) a bracket in which a mounting base for mounting said motor to an apparatus and a bearing housing are unitarily formed;
- (b) an oil-impregnated metal fixed to an inner wall of the bearing housing;
- (c) a stator in which a stator core wound with a coil is disposed on an outer wall of the bearing housing;
- (d) a rotor including a frame which has a plurality of through-holes on a top surface of the frame, a shaft fixed to the frame, and a rotor magnet fixed to the frame; and
 - (e) a cap facing the through-holes and disposed at a place spaced axially from the through-holes.
- 2. The motor of claim 1, wherein the bearing housing is a first burring-processed section at a center of said bracket, and the frame has a second burring-processed section at a center of the frame.
- 3. The motor of claim 1, wherein said cap is press-fitted to an inner 20 wall of the stator core, and an inner diameter of said cap at an end face not press-fitted is smaller than an inner diameter of said cap press-fitted.
 - 4. The motor of claim 1, wherein said cap is press-fitted to an inner wall of the stator core and has radial gap between an outer wall of said oil-impregnated metal and an inner wall of said cap.
 - 5. The motor of claim 1, wherein said cap is made of magnetic

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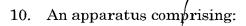
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material, and an attracting magnet is disposed outside said cap.

6. The motor of claim 5, wherein said cap is press-fitted to an inner wall of the stator core, and an inner diameter of said cap at an end face not press-fitted is smaller than an inner diameter of said cap press-fitted, and a height of the end face is greater than a height of an end face of the attracting magnet.

7. A motor comprising

- 10 (a) a bracket including a mounting base for mounting said motor to an apparatus;
 - (b) a bearing housing fixed to said bracket;
 - (c) an oil-impregnated metal housed in said bearing housing;
 - (d) a stator in which a stator core wound with a coil is disposed on an outer wall of said bearing housing;
 - (e) a rotor including a frame which has a plurality of throughholes on a top surface of the frame, a shaft fixed to the frame, and a rotor magnet fixed to the frame; and
- (f) an attracting magnet facing the through-holes, spaced axially from the through-holes, and disposed on an upper face of the stator core.
 - 8. The motor of claim 7, wherein the frame has a burring-processed section at a center of the frame.
- 9. The motor of claim 7, wherein said attracting magnet is a sintered magnet of Neodymium-Iron-Boron system.



a housing; and

a motor mounted within said housing via a mounting base, wherein said motor includes:

- 5 (a) a bracket in which the mounting base and a bearing housing are unitarily formed;
 - (b) an oil-impregnated metal fixed to an inner wall of the bearing housing;
- (c) a stator in which a stator core wound with a coil is
 disposed on an outer wall of the bearing housing;
 - (d) a rotor including a frame which has a plurality of through-holes on a top surface of the frame, a shaft fixed to the frame, and a rotor magnet fixed to the frame; and
- (e) a cap facing the through-holes and disposed at a place spaced axially from the through-holes.
 - 11. The apparatus of claim 10, wherein said cap is made of magnetic material, and an attracting magnet is disposed outside said cap.
- 20 12. An apparatus comprising:

a housing; and

a motor mounted within said housing via a mounting base, wherein said motor includes:

- (a) a bracket including the mounting base;
- (b) a bearing housing fixed to said bracket;
- (c) an oil-impregnated metal housed in said bearing

housing;

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(d) a stator in which a stator core wound with a coil is disposed on an outer wall of said bearing housing;

(e) a rotor including a frame which has a plurality of through-holes on a top surface of the frame, a shaft fixed to the frame, and a rotor magnet fixed to the frame; and

(f) an attracting magnet facing the through-holes, spaced axially from the through-holes, and disposed on an upper face of the stator core.

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